

**REMARKS**

Request for Continued Examination of the application in light of the amendment and remarks herein set forth is respectfully requested.

***Information Disclosure Statement***

The Examiner states that the crossed out portions of the information disclosure statements filed 12/19/03, 4/14/03 and 4/7/04 fail to comply with the provisions of 37 C.F.R. 1.97, 1.98 and MPRP § 609. An information disclosure statement complying with the cited provisions is being filed with the present Amendment and Response.

***Reissue Application***

The Office Action of July 12, 2004 indicates the reissue declaration filed 5/17/2001 is incomplete because page 1 of the declaration is missing from the official file. As requested, Applicant hereby submits a supplemental declaration in accordance with 37 CFR 1.175 (b) (1) with the instant amendment. Applicant has included the language suggested by the Examiner in the Office Action.

***Specification***

The Office Action of July 12, 2004 indicates that a correction filed on 9/7/2000 to SEQ ID NO:30 in Table 1 was not made as set forth in 37 CFR 1.173 (b) (1) because the original sequence was not shown as being deleted by bracketing and the new sequence was not shown as being added by underlining. Applicant hereby submits the required correction to SEQ ID NO:30 in the proper format in the section entitled "in the specification" above. The new sequence

corresponds to the nuclear localization sequence delimited for Mouse c-abl in Table 1 on page 676 of the source reference (Van Etten *et al.*, Cell 58:669-678 (1989)) (previously submitted).

While inspecting of Table 1, an error was uncovered in SEQ ID NO:13. Table 1 in the parent specification lists a representative sample of nuclear localization signals and expressly incorporates by reference Garcia-Bustos *et al.*, Biochem. Biophys. Acta 1071 : 83 (1991) (previously submitted) as authority. See col. 5, first line following Table 1 in the instant patent. The Garcia-Bustos *et al.* citation indicates in the fourth column of its Table 1 on page 86 that the position of the nuclear localization signal for Yeast Histone 2B is at amino acids 28-33. However, the sequence in the Garcia-Bustos *et al.* table, G-K-K-R-S-K-A<sup>35</sup>, indicates amino acids 29-35 are listed.

What follows is a chain of error in the sequence listing. The Garcia-Bustos *et al.* table indicates the primary reference is Moreland, R.B., *et al.*, Mol. Cell. Biol. 7, 4048-4057 (attached). The Moreland reference abstract states “[a]mino acids 28 to 33 in H2B were required for nuclear localization” (abstract, line 2). The abstract then continues “[t]he sequence in this region (Gly-29 Lys Lys Arg Ser Lys Ala) is similar to [...]” (abstract, line 3). In creating the Garcia-Bustos *et al.* table, the authors apparently assumed that the amino acid sequence “Gly-29 Lys Lys Arg Ser Lys Ala” in the Moreland abstract was referring to the sequence required for nuclear localization. However, a review of Moreland indicates it is obviously referring to two separate amino acid sequences within Histone 2B, i.e., 28 to 33 and 29 to 35, since the leading glycine of the second sequence is labeled amino acid number 29, not 28.

Thus the Garcia-Bustos *et al.* the nuclear localization amino acid sequence for Histone 2B in its table is a mistake. The Moreland primary reference clearly states the sequence of amino acids encompassing the NLS (the region of 28 to 33) on page 4052:

The region encompassing amino acids 28 to 33 was further characterized by [...] this result delimited a nuclear localization domain to the short sequence from amino acids 23 to 33 (Thr Ser Thr Ser Thr Asp Gly Lys Lys Arg Ser).

Based on the paragraph quoted above, the sequence amino acids in the region of 28 to 33 is Asp-28 Gly Lys Lys Arg Ser. Consequently, the sequence in the Garcia-Bustos *et al.* table should have been D-G-K-K-R-S<sup>33</sup>. Thus the sequence listing in the parent specification, G-K-K-R-S-K-A<sup>35</sup>, is in error. Applicant has consequently introduced the present amendment in the specification and the accompanying declaration to correct the sequence listing error.

The Office Action of July 12, 2004 indicates the 6/16/2003 amendment improperly added the continuity data because the sentence/paragraph being added was not underlined as required. Applicant regrets this oversight and hereby submits the required continuity data in the proper format in the section entitled "in the specification" above.

### ***Claim Objections***

The Office Action of July 12, 2004 indicates the last set of claims filed 1/30/2001 were not properly reproduced in the official file. Applicant hereby submits the claims as filed on 1/30/2001 in the section entitled "in the claims" above.

The Office Action of July 12, 2004 rejected claims 1-7 and 9-12 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3, and 5 of U.S. Patent No. 5,811,297. The Office Action indicates that a terminal disclaimer in compliance with 37 CFR 1.130 (b) may be used to overcome this rejection. As suggested, Applicant hereby submits PTO Form SB/26 with the instant amendment. The conveyance of U.S. Patent No. 5,811,297 to the assignee in the instant application is recorded on reel 015035, frame 0709 at the Assignment Services Division (ASD) of the Office of Public Records.

***Response to Applicant's Arguments and Amendment***

Applicant acknowledges Examiner's statement that the arguments and declarations filed 6/16/2003 were sufficient to overcome the Woo and Smith references. Applicant understands that based on the arguments presented on 4/14/2004 that the claims during examination were interpreted by the Examiner as broadly as their terms reasonably allow as required by MPEP §2111.01. That is, the "plain meaning" of the claim wording was used by the Examiner during examination of the instant application in this request for continued examination.

**CONCLUSION**

Applicant respectfully submits that the claims now stand ready and in condition for allowance. Early consideration of the above amendments and remarks and of the Declaration attached is respectfully requested.

A request for Extension of Time under the provisions of 37 CFR §1.136(b) was submitted on September 14, 2004. Therefore, Applicant does not believe that any fees or additional extensions of time are required in conjunction with this submission. However, in the event that any additional extension of time is necessary to prevent the abandonment of this patent application, then such extension of time is hereby petitioned. The U.S. Patent and Trademark Office is hereby authorized to charge any fees that may be required in conjunction with this submission to Deposit Account Number 50-2228, referencing matter number 020728.0101PTUS.

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